



# SCADA Master Plan

Napa Sanitation District  
Board of Directors Meeting  
May 6, 2020



# SCADA MP Background

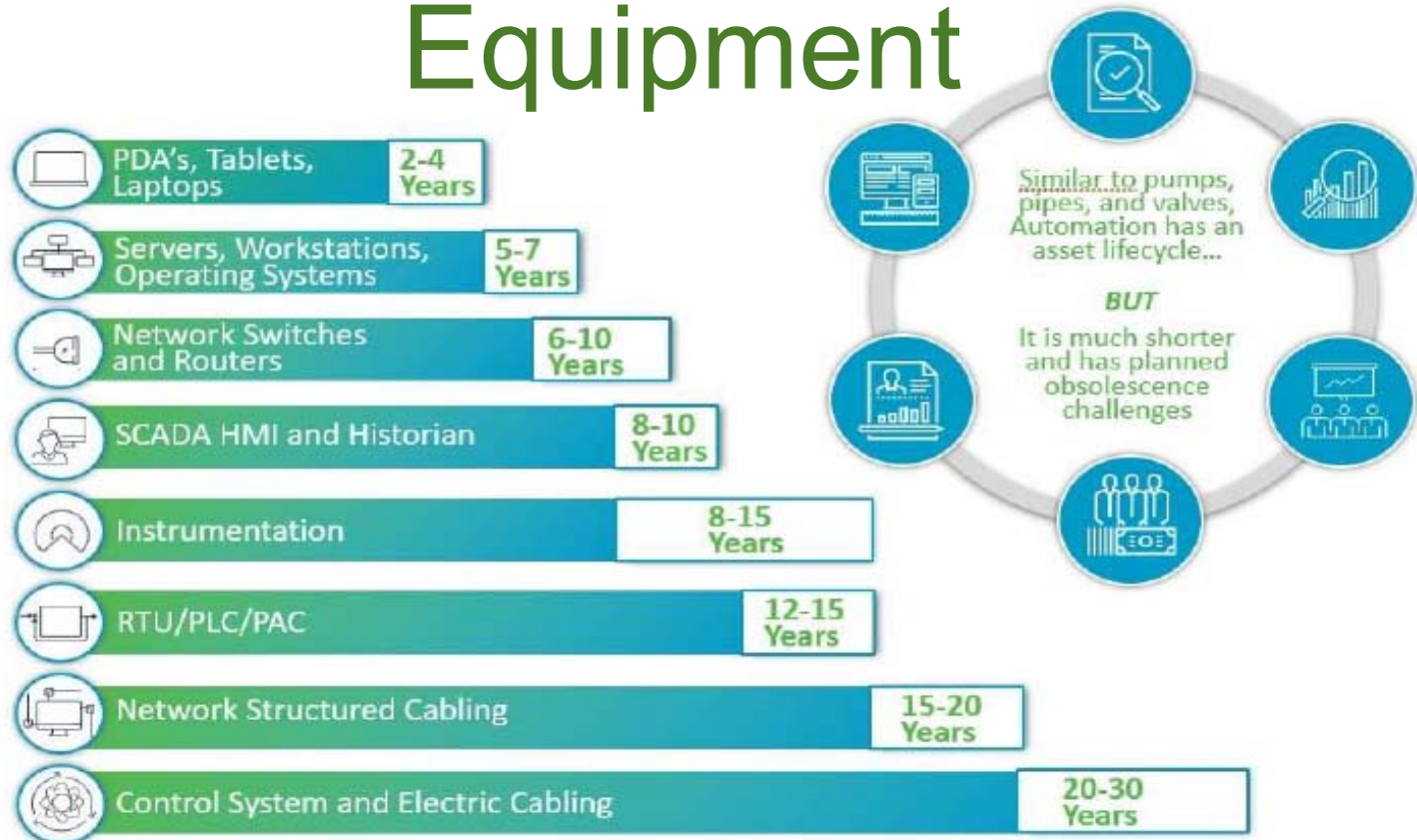
- SCADA Master Plan (SCADA MP) 2007
  - Proposed 3 Phases of projects
    - Urgent and Important project were completed
    - Useful projects are either underway or have been reevaluated
- Westin Technology Solutions prepared the current and 2007 SCADA MP



# Goals of our SCADA MP

- Evaluate short and long term needs and prepare a gap analysis (comparison against BIP)
  - Cyber Security
  - System Architecture
  - Equipment Selection
  - Redundancy
  - Asset Life Cycle

# Life Cycle of SCADA Equipment





# SCADA MP Phases in a Nutshell

- Urgent Actions – Emphasis on security.
- Important Actions – Emphasis on SCADA equipment upgrades.
- Useful Actions – Emphasis on control panel upgrades.



# Proposed Budget (\$3.75M)

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	FY 31/32	Total	
<b>Infrastructure &amp; Security</b>	\$225K	\$125K	\$150K	\$325K	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$825K	\$1.075M
<b>SCADA Equipment P1</b>	\$0	\$0	\$50K	\$50K	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100K	
<b>Alarming</b>	\$25K	\$125K	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150K	
<b>SCADA Equipment P2</b>	\$0	\$0	\$0	\$0	\$200K	\$225K	\$75K	\$0	\$0	\$0	\$0	\$0	\$500K	\$1.000M
<b>UPS System</b>	\$0	\$0	\$0	\$25K	\$75K	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100K	
<b>Software Management</b>	\$0	\$0	\$0	\$0	\$75K	\$75K	\$0	\$0	\$0	\$0	\$0	\$0	\$150K	
<b>Documentation</b>	\$0	\$0	\$0	\$0	\$100K	\$100K	\$0	\$0	\$0	\$0	\$0	\$0	\$200K	
<b>Change Management</b>	\$0	\$0	\$0	\$0	\$50K	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50K	
<b>Control Room</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150K	\$500K	\$0	\$650K	\$1.675M
<b>Control Panels</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$225K	\$350K	\$250K	\$0	\$0	\$0	\$825K	
<b>SCADA MP Update</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200K	\$200K	
<b>TOTAL</b>	\$250K	\$250K	\$200K	\$400K	\$500K	\$400K	\$300K	\$350K	\$250K	\$1500K	\$500K	\$200K	\$3.75M	



# Big Picture Projects

1. SCADA Infrastructure and Security
2. SCADA Equipment Reliability
3. Alarming



# Next Steps

1. Incorporate the proposed projects into the CIP.
2. Begin implementation of the Urgent Actions.





# Questions

